

137.13

Date: Friday, 25/04/2008 10:55:20 AM
 User: Jean-Luc Menard

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : BRACKET ASSEMBLY
 Job Number : 38788
 Estimate Number : 13280
 P.O. Number :
 This Issue : 25/04/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : 11 Type : MACHINED PARTS
 Previous Run :
 Written By : *PL/08.04.26*
 Checked & Approved By :
 Comment : Est Rev:A New Issue 08-04-25 JLM Verified By:DD

Part Number : D3674041
 Drawing Number : D3121 PROTO
 Project Number : N/A
 Drawing Revision : PROTO
 Material :
 Due Date : 02/05/2008 Qty: 3 Um: Each

PRELIM ASS 08/05/06
ASS 08/05/06
 POSITIVE RECALL

Additional Product

~~FOR ENGINEERING USE ONLY~~

~~PROTOTYPE~~ ASS
 PRELIMINARY ISSUE

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M174B1000X02000 17-4 SS Bar



Comment: Qty.: 0.5775 f(s)/Unit Total : 2.3100 f(s)

Material: 17-4 SS Bar per AMS 5604/5643

(M17-4-B1.000x02.000)

Identify for D3674-1

Batch: M 19478

6 p/s

→ SCRAP!!

NA. 08/05/06

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blanks: (1.000" x 2.000") 5.400" long

NA. 08/05/05 NA. 08/05/06

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3674-1 as per Folio FA732 and Dwg D3674 Identify as D3674-1

2-Deburr

3-Scribe batch number

NA. / KML 08/05/07

08/05/05

PIC →

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

NA. / KML 08/05/07 08/05/05

6 parts script
SA 08/05/06
part 3 dep broken into part
SA 08/05/06
Programmer
2/10/1

See NCRW0 shoot

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 38788

Part Number: D3674041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

88 08/05/08

6.0

D312121

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-21

Bolt

37879

SA

08/05/08

7.0

D3121241

Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-241 Bearing Ass

37750

SA

08/05/08

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble D3121-141 as per Dwg D3121.

SA

08/10/08

9.0

QC5

INSPECT WORK TO CURRENT STEP



ASS
08/05/08

ENGINEERING
APPROVAL



Comment: INSPECT WORK TO CURRENT STEP

08/05/08

(3)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

SA

stores

08/07/09

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/07/10

Job Completion



POSITIVE RECALL

EFFECTIVE 08/05/08 AUTH

RELEASED ASS DATE 08/05/08

Change To w/o #0020


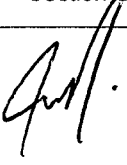

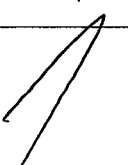




08/05/09

Dart Aerospace Ltd

W/O: 38788		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3674-041 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR: 38788		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/05/06	3.0	6 parts scrap. -programming error		Fix & update Prog. & Tooling. scrap & replace / m 19478 Qty 4	SD 08/05/06			
08/05/08	3.0	1 part - lap broke into part while lapping		Scrap & destroy NO-Replace.	SD 08/05/08			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 38788
Description: BRACKET ASSEMBLY		Part Number: D3674041
Inspection Dwg: 3674041 Rev: PROTO		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.960	+/- .010	1.961	✓			
0.750	+/- .010	0.749	✓			
0.605	+/- .010	0.606	✓			
3.380	+/- .010	3.377	✓			
2.430	+/- .010	2.430	✓			
0.380	+/- .010	0.380	✓			
0.73	+/- .030	0.730	✓			
0.95	+/- .030	0.949	✓			
2.140	+/- .010	2.140	✓			
2.030	+/- .010	2.030	✓			
4.718	+/- .010	4.720	✓			
4.590	+/- .010	4.590	✓			
0.863	+/- .010	0.868	✓			
0.130	+/- .010	0.133	✓			
4.600	+/- .010	4.600	✓			
4.880	+/- .010	4.883	✓			
5.139	+/- .010	5.141	✓			
R0.25	+/- .030	R0.250	✓			
0.080	+/- .010	0.080	✓			
0.300	+/- .010	0.300	✓			
30°	+/- 1/2°	30°	✓			
Ø.573	+/- .010	Ø.573	✓			
0.720	+/- .010	0.720	✓			

Measured by: <u>Y.A/gm</u>	Audited by: <u>DJP</u>	Prototype Approval: <u>N/A</u>
Date: <u>08/05/07</u>	Date: <u>08/05/07</u>	Date: <u>N/A</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order: 38788
Description: BRACKET ASSEMBLY		Part Number: D3674041
Inspection Dwg: 3674041 Rev: PROTO		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

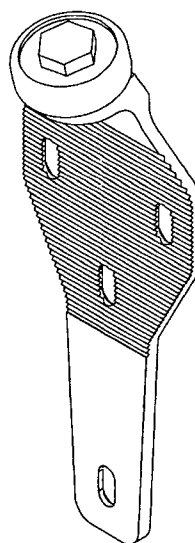
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.345	+/- .010	0.344	✓			
Ø 0.392	+ .002 / - .000	Ø 0.393	✓			
2.173	+/- .010	2.173	✓			
3.135	+/- .010	3.135	✓			
3.963	+/- .010	3.963	✓			
4.365	+/- .010	4.365	✓			
0.664	+/- .010	0.6645	✓			
100°	+/- 1/2°	100°	✓			
0.076	+/- .010	0.076	✓			
0.200	+/- .010	0.202	✓			
0.200	+/- .010	0.200	✓			
R0.10	+/- .030	R0.10	✓			
0.032	+/- .010	0.032	✓			
0.050	+/- .010	0.050	✓			
0.025	+/- .010	0.025	✓			
0.75	+/- .030	0.750	✓			
R0.375	+/- .010	R0.375	✓			
10-32 UNF 3B		10-32 UNF 3B	✓			
Ø 0.201 x .100	+/- .010	Ø 0.200 x .099	✓			
R0.20	+/- .030	R0.20	✓			

Measured by: B.A/pwz	Audited by: DJP	Prototype Approval: N/A
Date: 08/05/07	Date: 08/05/07	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

QTY -041	PART NUMBER	DESCRIPTION
X	D3674-041	ROLLER BRACKET ASSEMBLY
1	D3121-21	BOLT
1	D3121-241	BEARING ASSEMBLY
1	D3674-1	BRACKET

PRELIMINARY ISSUE
AS of 08.03.26



D3674-041 BRACKET ASSEMBLY

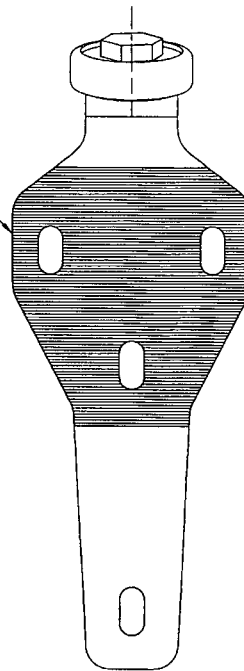
RELEASED
08.06.26

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: N/A
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.23 lbs
 - 8) TORQUE D3121-21 BOLT 15-25 in lbs (1.7-2.8 Nm)

A	NEW ISSUE	AJS	08.03.26
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>AS</i>	DRAWING NO.	REV. A
CHECKED	<i>[Signature]</i>	D3674	SHEET 1 OF 4
MFG. APPR.	<i>[Signature]</i>	TITLE	SCALE
APPROVED	<i>[Signature]</i>	ROLLER BRACKET ASSEMBLY	NTS
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DATE	08.03.26		

PRELIMINARY ISSUE
AJS 0805/06

D3674-1 BRACKET



D3674-041 BRACKET ASSEMBLY

8
D3121-21 BOLT

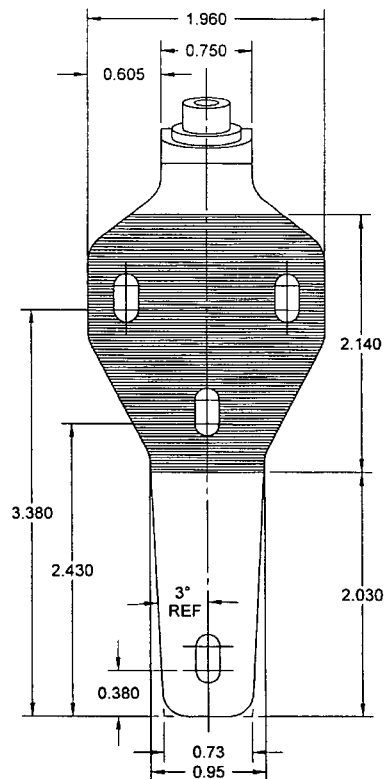
D3121-241 BEARING ASSEMBLY



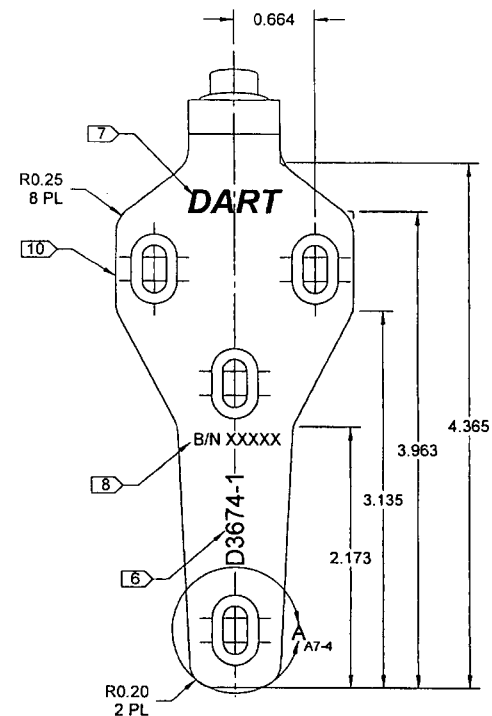
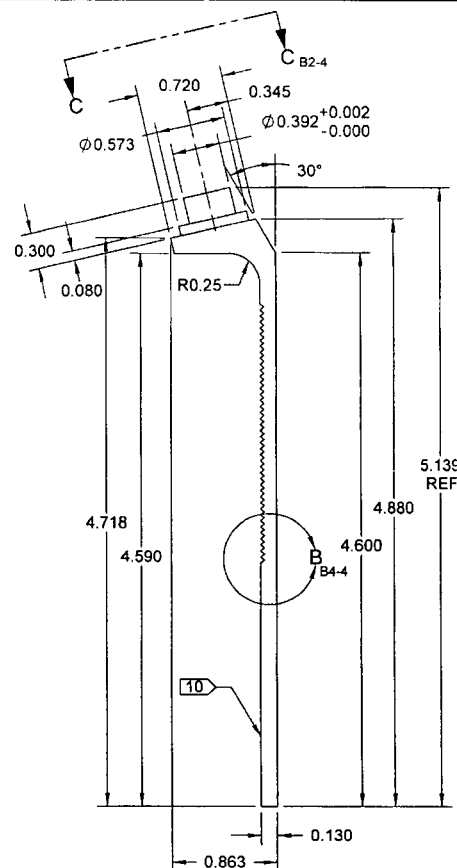
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08-03-26

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DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	[Signature]	DRAWING NO.	REV. A
MFG. APPR.	[Signature]	D3674	SHEET 2 OF 4
APPROVED	[Signature]	TITLE	SCALE
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PRELIMINARY ISSUE
155 08/05/06



D3674-1 BRACKET

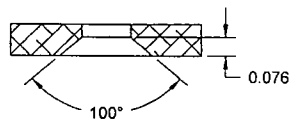


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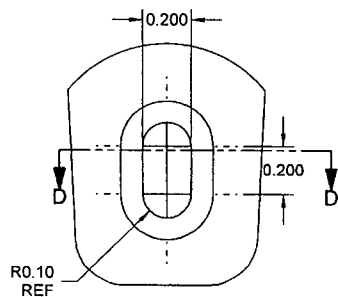
- 1) MATERIAL: 17-4 PH, STAINLESS STEEL BAR
PER AMS 5604/5643
GRAIN DIRECTION MUST BE ALONG THE LENGTH OF THE BRACKET
MINIMUM YIELD TENSILE STRENGTH = 100 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 150 ksi
(REF. DART SPEC. M17-4-B)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE WITH DART P/N "D3674-1" WITH 0.15 HIGH LETTERS TO A
MAX DEPTH OF 0.010 IN AREA SHOWN
- 7) IDENTIFICATION: ENGRAVE DART LOGO WITH 0.20 HIGH LETTER TO A
MAXIMUM DEPTH OF 0.010 IN AREA SHOWN
- 8) IDENTIFICATION: SCRIBE DART B/N USING VIBRATING STYLUS
- 9) WEIGHT: 0.03 lbs
- 10) BASIC PROFILE OF D3674-1 BRACKET TAKEN FROM D3121-141 REF.

RELEASED
28 DEC 2010

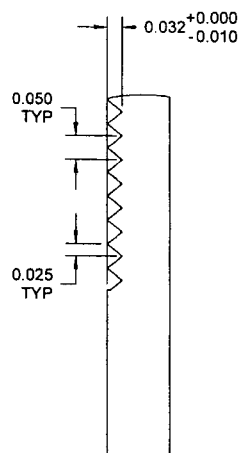
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DRAWN	APS		
CHECKED	W	DRAWING NO. D3674	REV. A
MFG. APPR.	W	TITLE	SHEET 3 OF 4
APPROVED	W	ROLLER BRACKET ASSEMBLY	SCALE
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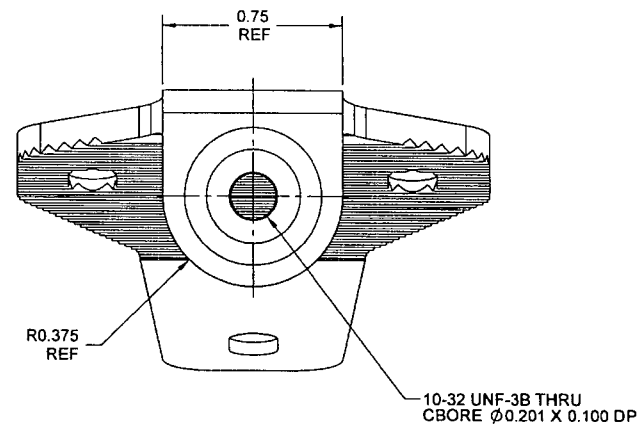
SECTION D-D



DETAIL A B2-3
SCALE 2X
(SLOT DETAIL 4PL)



DETAIL B C4-3
SCALE 4X
(RIDGE DETAIL)



VIEW C-C D3-3
SCALE 2X

RELEASED
108-06-26-16A

PRELIMINARY ISSUE
AJS 08/03/06

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CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3674	SHEET 4 OF 4
APPROVED		TITLE	SCALE
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